

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/689,551	YANG, HA-YEONG	
	<b>Examiner</b>	<b>Art Unit</b>	
	Quang T Van	3742	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment filed on 11/08/04.
2. ☒ The allowed claim(s) is/are 1-10 and 12-31.
3. ☒ The drawings filed on 11 June 2003 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).


\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment                               |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|   | 9. <input type="checkbox"/> Other _____  |

  
 Quang T Van  
 Primary Examiner  
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### **REASON FOR ALLOWANCE**

1. The following is an examiner's statement of reasons for allowance: allowance of claims 1-10, 12-31 are indicated because the prior art of record does not show or suggest a variable suction hole and a variable suction hole adjusting unit controlling the variable suction hole motor according to the rotation speed of the exhaust motor as recited in claims 1-7; a suction hole adjusting unit to increase or decrease the size of the suction area of the suction hole when the exhaust motor rotates at a high rotation speed or the low rotation speed, respectively as recited in claims 8-16; a control unit controlling an operation of the microwave oven, and a variable suction hole adjusting unit, connected to the control unit, to control the suction area of the variable suction hole by changing a rotating direction of the variable suction hole drive motor as recited in claims 17-28; a variable suction hole adjusting unit to rotate a variable suction hole drive motor in forward and reverse directions to open and close, respectively, a variable suction hole, comprising the steps of turning the second exhaust switch on while the first exhaust switch is turned off, supply power to the exhaust motor, through the normally open contact points of the second relay, which are closed, and the normally open contact points which are closed, to rotate the exhaust motor at low speed, and supplying power to the variable suction hole adjusting unit to rotate the variable suction hole drive motor in reverse, thereby closing the variable suction hole as recited in claim 29; a variable suction hole adjusting unit to rotate a variable suction hole drive motor in forward and reverse directions to open and close, respectively, a variable suction hole, comprising the steps of turning the first exhaust switch on while the second exhaust

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switch is turned on, supplying power to the exhaust motor, through the normally open contact points of the first relay, which are closed, and supplying power to the variable suction hole adjusting unit to rotate the variable suction hole drive motor forward, thereby opening the variable suction hole as recited in claim 30; and a control unit controlling an operation of the microwave oven, and a variable suction hole adjusting unit, connected to the control unit, to control the suction area of the variable suction hole according to the rotation speed of the exhaust motor as recited in claim 31.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quang T Van whose telephone number is 571-272-4789. The examiner can normally be reached on 8:00Am 7:00Pm M-Th.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robin Evans can be reached on 571-272-4777. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



QV

December 22, 2004



Quang T Van  
Primary Examiner  
Art Unit 3742